ARTICLE XI

AQUIFER PROTECTION DISTRICT

A. AUTHORITY AND PURPOSE

Pursuant to RSA 674:16-21, the Town of Fremont adopts an Aquifer Protection District and accompanying regulations in order to protect, preserve and maintain potential groundwater supplies and related groundwater recharge areas within a known aquifer identified by the Town. The objectives of the aquifer protection district are:

- to protect the public health and general welfare of the citizens of the Town of Fremont;
- to prevent development and land use practices that would contaminate or reduce the recharge of the identified aquifer;
- to promote future growth and development of the Town, in accordance with the Master Plan, by insuring the future availability of public and private water supplies;
- to encourage uses that can appropriately and safely be located in the aquifer recharge areas.

B. ADMINISTRATION

- General: The provision of the Aquifer Protection District shall be administered by the Planning Board. All development proposals, other than single or two-family residential construction not involving the subdivision of land, shall be subject to subdivision and/or site plan review and approval in accordance with Planning Board rules and regulations. Such review and approval shall precede the issuance of any building permit by the Town.
- 2. Enforcement: The Board of Selectmen shall be responsible for the enforcement of the provisions and conditions of the Aquifer Protection District.

C. DEFINITIONS

Animal Feedlot: A commercial agricultural establishment consisting of confined feeding areas and related structures used for the raising of livestock. An animal feedlot shall be considered one on which more than five (5) animals are raised simultaneously.

Aquifer: For the purpose of this Ordinance, aquifer means a geologic formation, group of formations, or part of a formation that is capable of yielding quantities of groundwater usable for municipal or private water supplies.

Dwelling Unit: A building or that portion of a building consisting of one or more rooms designed for living and sleeping purposes, including kitchen and sanitary facilities and intended for occupancy by not more than one family or household.

Groundwater: All the water below the land surface in the zone of saturation or in rock fractures capable of yielding water to a well.

Groundwater Recharge: The infiltration of precipitation through surface soil materials into groundwater. Recharge may also occur from surface waters, including lakes, streams and wetlands.

Leachable Wastes: Waste materials, including solid wastes, sludge and agricultural wastes that are capable of releasing contaminants to the surrounding environment.

Mining of Land: The removal of geologic materials such as topsoil, sand and gravel, metallic ores, or bedrock to be crushed or used as building stone.

Non-Conforming Use: Any lawful use of buildings, structures, premises, land or parts thereof existing as of the effective date of this Ordinance, or amendment thereto, and not in conformance with the provisions of this Ordinance, shall be considered to be a non-conforming use.

Non-Municipal Well: Any well not owned and operated by the Town of Fremont or its agent.

Recharge Area: The land surface area from which groundwater recharge occurs.

Septage: Liquid or solid waste generated by septic disposal systems. Septic waste containing wash water, gray waters, human feces, excrement, dregs, sediment, grease, oils and any other waste generated in a domestic septic disposal system.

Sludge: Residual materials produced by the sewage treatment process. **Solid Waste:** Any discarded or abandoned material including refuse, putrescible material, septage, or sludge, as defined by New Hampshire Solid Waste Rules He-P 1901.03. Solid waste includes solid, liquid, semi-solid, or contain gaseous waste material resulting from residential, industrial, commercial, mining, and agricultural operations and from community activities.

Structure: Anything constructed or erected, except a boundary wall or fence, the use of which requires location on the ground or attachment to something on the ground. For the purposes of this Ordinance, buildings are structures.

Toxic or Hazardous Materials: Any substance or mixture of such physical, chemical, or infectious characteristics as to pose a significant, actual or potential hazard to water supplies, or other hazard to human health, if such substance or mixture were discharged to land or waters of this Town. Toxic or hazardous materials include, without limitation, volatile organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalies, and include products such as pesticides, herbicides, solvents and thinners, and such other substances as defined in New Hampshire Water Supply and Pollution Control Rules, Section Ws 410.04 (1), in New Hampshire Solid Waste Rules He-P 1901.03 (v), and in the Code of Federal Regulations 40 CFR 261. Wastes generated by the following commercial activities are presumed to be toxic or hazardous, unless and except to the extent that anyone engaging in such an activity can demonstrate the contrary to the satisfaction of the Planning Board:

- □ Airplane, boat and motor vehicle service and repair;
- Chemical and bacteriological laboratory operation;
- Dry cleaning;
- Electronic circuit manufacturing;
- Metal plating, finishing and polishing;
- Motor and machinery service and assembly;
- Painting, wood preserving and furniture stripping;
- Pesticide and herbicide application;
- Photographic processing;
- Printing.

D. DISTRICT BOUNDARIES

1. Location

The Aquifer Protection District is defined as the area shown on the map entitled Fremont Water Resources Map 2004.

The Aquifer Protection District is a zoning overlay district which imposes additional requirements and restrictions to those of the current ordinances. In all cases, the more restrictive requirement(s) shall apply.

2. Recharge Areas

For the purpose of this Ordinance, the primary recharge area for the identified aquifer is considered to be co-terminus with the Aquifer and the High Potential to Yield Groundwater areas.

No secondary recharge area has been identified at the time of enactment.

3. Appeals

Where the bounds of the identified aquifer or recharge area, as delineated, are in doubt or in dispute, any landowner aggrieved by such delineation may appeal the boundary location to the Planning Board. Upon receipt of such appeal, the Planning Board shall suspend further action on development plans related to the area under appeal and shall engage, at the landowner's expense, a qualified hydrogeologist to prepare a report determining the proper location and extent of the aquifer and recharge area relative to the property in question. The aquifer delineation shall be modified by such determination subject to review and approval by the Planning Board.

E. USE REGULATIONS

1. Minimum Lot Size

The minimum lot size within the Aquifer Protection District for each dwelling unit if a residential use, or each principal building if a non-residential use, shall be three (3) acres, or 130,680 square feet.

2. Hydrogeologic Study

For development proposals within the Aquifer Protection District, a hydrogeologic study shall be performed, by an engineer registered in the State of New Hampshire or a registered hydrologist. This study shall evaluate the development's impacts to groundwater within both the parcel to be developed and the surrounding land. The groundwater quality beyond the property lines of said site shall not be degraded by polluting substances such as nitrates, phosphates, bacteria, etc. Larger lots may be required based on the findings of said study.

This information will be required for proposed subdivisions of four (4) lots or greater. For subdivisions of three (3) lots or less the Planning Board will determine, on a case-by-case basis, the need for a hydrogeologic study. Particularly sensitive sites may include areas that have septic systems in close proximity to wells, or may contain excessively drained soils or steep slopes.

3. Maximum Lot Coverage

Within the Aquifer Protection District, no more than ten percent (10%) of a single lot, may be rendered impervious to groundwater infiltration.

4. Prohibited Uses

The following uses are prohibited in the Aquifer Protection Zone except where permitted to continue as a non-conforming use:

- a. Disposal of solid waste including brush or stumps.
- b. Storage and disposal of hazardous waste.
- c. Disposal of liquid, septage or leachable wastes except that from one or two-

family residential subsurface disposal systems, or as otherwise permitted as a conditional use.

- d. Subsurface storage of petroleum and other refined petroleum products.
- e. Industrial uses which discharge contact type process waters on-site. Non-contact cooling water is permitted.
- f. Outdoor unenclosed storage or use of road salt or other de-icing chemicals.
- g. Dumping of snow containing de-icing chemicals brought from outside the district.
 - h. Animal feedlots.

(see definitions = five (5) or more animals)

- i. Automotive service and repair shops, junk and salvage yards.
- j. All on site handling, disposal, storage, processing or recycling of hazardous or

toxic materials.

k. Drycleaning or Laundry facilities.

5. Permitted Uses

The following activities may be permitted provided they are conducted in accordance with the purposes and intent of this Ordinance:

- a. Land development, per the Fremont Zoning Ordinance, except as prohibited in Section E.4. of this A.P.O.
 - b. Activities designed for conservation of soil, water, plants and wildlife.
- c. Outdoor recreation, nature study, boating, fishing and hunting where otherwise legally permitted.
- d. Normal operation and maintenance of existing water bodies and dams, splash boards and other water control, supply and conservation devices.
 - e. Foot, bicycle, and/or horse paths and bridges.
- f. Maintenance, repair of any existing structure, provided there is no increase in impermeable surface above the limit established in Section E.3. of this A.P.O.
- g. Farming, gardening, nursery, forestry, harvesting and grazing, provided that fertilizers, herbicides, pesticides, manure and other leachables are used

appropriately at levels that will not cause groundwater contamination and are stored under shelter.

6. Special Exceptions

The following uses are permitted as Special Exceptions (in compliance with Town Zoning Ordinance):

 Industrial and commercial uses not otherwise prohibited in Section E.4. of this A.P.O.

- 2. Multi-family residential development. (Minimum lot size to be determined by using Article IV Section 3 and substituting three (3) acres instead of two (2) acres).
 - 3. Sand and gravel excavation and other mining provided that such excavation

or mining is not carried out within eight (8) vertical feet of the seasonal high

water table and that periodic inspections are made by the Planning Board or

its agent to determine compliance.

The Board of Adjustment may grant a special exception for those uses listed above only after written findings of fact are made that all of the following are true:

- the proposed use will not detrimentally affect the quality of the groundwater contained in the aquifer by directly contributing to pollution or by increasing the long-term susceptibility of the aquifer to potential pollutants;
- the proposed use will not cause a significant reduction in the long-term volume of water contained in the aquifer or in the storage capacity of the aquifer:
- the proposed use will discharge no waste water on site other than that typically discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of toxic or hazardous wastes as herein defined;
- □ the proposed use complies with all other applicable sections of this Article.

The Board of Adjustment may require that the applicant provide data or reports prepared by a professional engineer or hydrologist to assess any potential damage to the aquifer that may result from the proposed use. The Board of Adjustment shall engage such professional assistance as it requires to adequately evaluate such reports and to evaluate, in general, the proposed use

in light of the above criteria. Costs incurred shall be the responsibility of the applicant.

6. Septic System Design and Installation

In addition to meeting all local and state septic system siting requirements, all new on-lot waste water disposal systems installed in the District shall be designed by a Sanitary Engineer licensed in New Hampshire. These systems shall be installed under the supervision of said engineer. The Planning Board or its agent shall inspect the installation of each new system prior to covering, and shall certify that the system has been installed as designed.

Septic systems are to be constructed in accordance with the most recent edition of the "The State of New Hampshire Subdivision and Individual Sewage Disposal System Design Rules" as published by the New Hampshire Water Supply and Pollution Control Division.

However, the following more stringent requirements shall apply to all septic system construction:

- a. There will be no filling of wetlands allowed to provide the minimum distance of septic to wetlands. (Ws 1007.04)
- b. The seasonal high water table will be at least two (2) feet below the original ground surface during all seasons of the year (instead of six (6) inches). (Ws 1015.01(a)).
- c. There will be at least three (3) feet of natural permeable soil (instead of two (2) feet) above any impermeable subsoil. (Ws 1015.01(b)).
- d. There will be at least four (4) feet of natural soil (instead of three (3) feet) above bedrock. (Ws 1015.01(b)).
- e. Standards for fill material: Fill material consisting of organic soils or other organic materials such as tree stumps, sawdust, wood chips and bark, even with a soil matrix shall not be used. The in place fill should have less than fifteen (15%) percent organic soil by volume. The in place fill should not contain more than twenty five (25%) percent by volume of cobbles six (6) inch in diameter). The in place fill should not have more than fifteen percent (15%) by weight of clay size (.002 mm and smaller) particles. The fill should be essentially homogeneous. If bedding planes and other discontinuities are present, detailed analysis is necessary.

F. DESIGN AND OPERATIONS GUIDELINES

Where applicable the following design and operation guidelines shall be observed within the Aquifer Protection District:

- 1. Safeguards. Provision shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage, or vandalism through measures such as: spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodible or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.
- 2. Location. Where the premises are partially outside of the Aquifer Protection Overlay Zone, potential pollution sources such as on-site waste disposal systems shall be located outside the Zone to the extent feasible.
- 3. Drainage. All runoff from impervious surfaces shall be recharged on the site, and diverted toward areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are not feasible, and shall be preceded by oil, grease, and sediment traps to facilitate removal of contaminants.
- 4. Inspection. All special exceptions granted under Section 5.h. of this Article shall be subject to twice-annual inspections by the Building Inspector or other agent designated by the Selectmen. The purpose of these inspections is to ensure continued compliance with the conditions under which approvals were granted. A fee for inspection shall be charged to the owner according to a fee schedule determined by the Selectmen.

G. NON-CONFORMING USES

- 1. Any non-conforming use may continue and may be maintained, repaired and improved, unless such use is determined to be an imminent hazard to public health and safety. No non-conforming use may be expanded, changed to another non-conforming use, or renewed after it has been discontinued for a period of twelve (12) months or more.
- 2. Any non-conforming lot of record existing before the effective date of this Article may be used in accordance with Section E.2.-E.6. of this Article.

H. EFFECTIVE DATE

This Article shall become effective upon passage at Town Meeting March 1988.